

The New Face of z/OS Communications Server



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Objectives

- What is the Configuration Assistant and how can it help you (quick introduction)
- Configuration Assistant redesigned in V2R1 to improve performance, user experience, and integration with other z/OSMF plug-ins

Overview of what the Configuration Assistant Provides

- **Tool to simplify configuration of z/OS Communications Server**

- **Policy-based networking technologies**

- IP Security - IP Filter rules and VPN tunnels

- Along with configuration for NSS and DMD daemons
- Quickly create IP Sec policy to filter traffic to/from the network, or to secure and protect data

- Application Transport TLS (AT-TLS)

- Create policies to secure your applications using SSL/TLS. Predefined rules are provided for many IBM z/OS applications!

- Intrusion Detection Services (IDS)

- Detect signature events (ex:scans and attacks) that can cause a misuse of system resources.

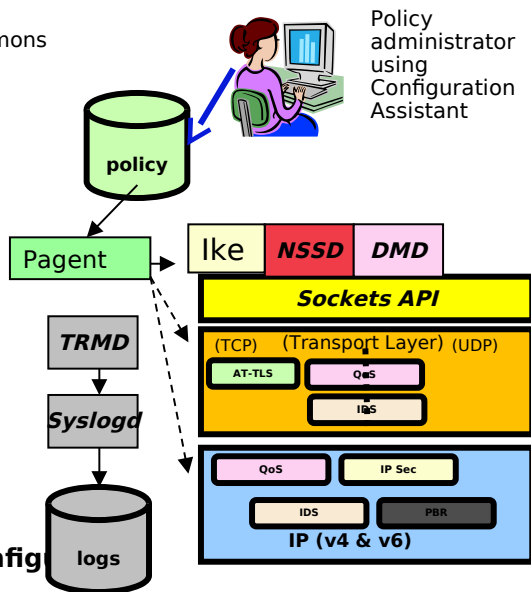
- Policy-based Routing (PBR)

- Create policies to allow TCP/IP to route traffic based upon criteria other than destination IP Address

- Quality of Service (QoS)

- Create policies to influence the performance of TCP/IP traffic

- **Starting in z/OS V2R2, TCP/IP profile config**



How can the Configuration Assistant Help?

- Simplifies about 6 chapters of publications documentation for the Policy-based networking technologies into **“a few clicks”**
- Simplifies over 1000 pages of documentation for the TCP/IP profile **into “a few clicks”**
- Provides a UI with wizards, helps, and tutorials that guide users through the configuration of policy rules providing a task-oriented approach
- Generates correct configuration (free from syntax errors)
- Provides health checks for configuration inconsistencies and recommends best practices Ex: “Don’t forget filter rules to permit DNS and OMPRoute”
- Supports import of existing policy configuration and TCP/IP profile flat files to get you started
- Also helps with setup of the networking environment-
ex: daemons such as Policy Agent, Syslogd, TRMD, pushing config files, etc..
 - Step by step guidance. Sample started procedures and required SAF profiles

Key Enhancements with the V2R1 Configuration Assistant

- With z/OS V2R1, the Configuration Assistant has been completely redesigned to better integrate with z/OSMF
 - This is the topic of this presentation
- For each new release, the Configuration Assistant supports new function in z/OS Communications Server in support of enhancements to the policy-based networking technologies
 - AT-TLS support for currency with z/OS System SSL
 - TLS V1.2 and new cipher suites
 - Renegotiation options (RFC 5746)
 - Elliptic Curve Cryptography (RFC 4492 and RFC 5480)
 - Details in [What's New](#) link on Configuration Assistant main page. Also, download the z/OS Communications Server V2R1 Technical Update Part 1 & 2 (14677 and 14678) here at Share!

Key Enhancements with the V2R2 Configuration Assistant

- With z/OS V2R2, the Configuration Assistant can configure TCP/IP profiles
 - Ability to import existing TCP/IP profile added by SPE 9/1/16
 - Dynamic reconfiguration coming (SOD issued).
- For each new release, the Configuration Assistant supports new function in z/OS Communications Server in support of enhancements to the TCP/IP profile
 - New configuration statements

Windows version of the Configuration Assistant is no longer provided

Official Statement of Direction

z/OS V1R13 is planned to be the final release for which the IBM Configuration Assistant too. that runs on Microsoft Windows will be provided by IBM. This tool is currently available as an as-is, nonwarranted web download. Customers who currently use the Window's-based IBM Configuration Assistant for z/OS Communications Server tool should migrate to the z/OS Management Facility (z/OSMF) Configuration Assistant. The IBM Configuration Assistant for z/OS Communications Server that runs within z/OSMF is part of a supported IBM product and contains all functions supported with the Windows tool.

- As of z/OS V2R1, no longer providing the Microsoft Windows version
 - Configuration Assistant has been available with z/OSMF since z/OS V1R11
- As of z/OS V2R1, users must migrate to the Configuration Assistant that is a plug-in to z/OSMF.

Many benefits to the Configuration Assistant in z/OSMF

- z/OSMF is the new, strategic z/OS systems management console
 - Configuration Assistant provides the systems management function for policy-based network configuration
- Satisfies requirements from many customers to provide the Configuration Assistant as a browser-based application
- Provides the ability to have centralized product access for multiple users vs a “fat client”
 - Rather than downloading and managing several copies across workstations in the enterprise
- Runs on the platform its configuring and allows for centrally managing configuration backing stores (configuration metadata)
 - Generated configuration files can be saved locally to the shared file system for consumption by target systems (may not require FTP)

Many benefits to Configuration Assistant in z/OSMF...continued..

- Configuration Assistant as an IBM product vs “as-is tool” becomes more important and strategic for enhancing
- z/OSMF provides official IBM product with support and delivery through official channels
 - Windows version has been “as-is” and “best-effort” for support
- Allows for easier integration with other z/OSMF plug-ins and applications in the future
 - Cross-product linking to provide value

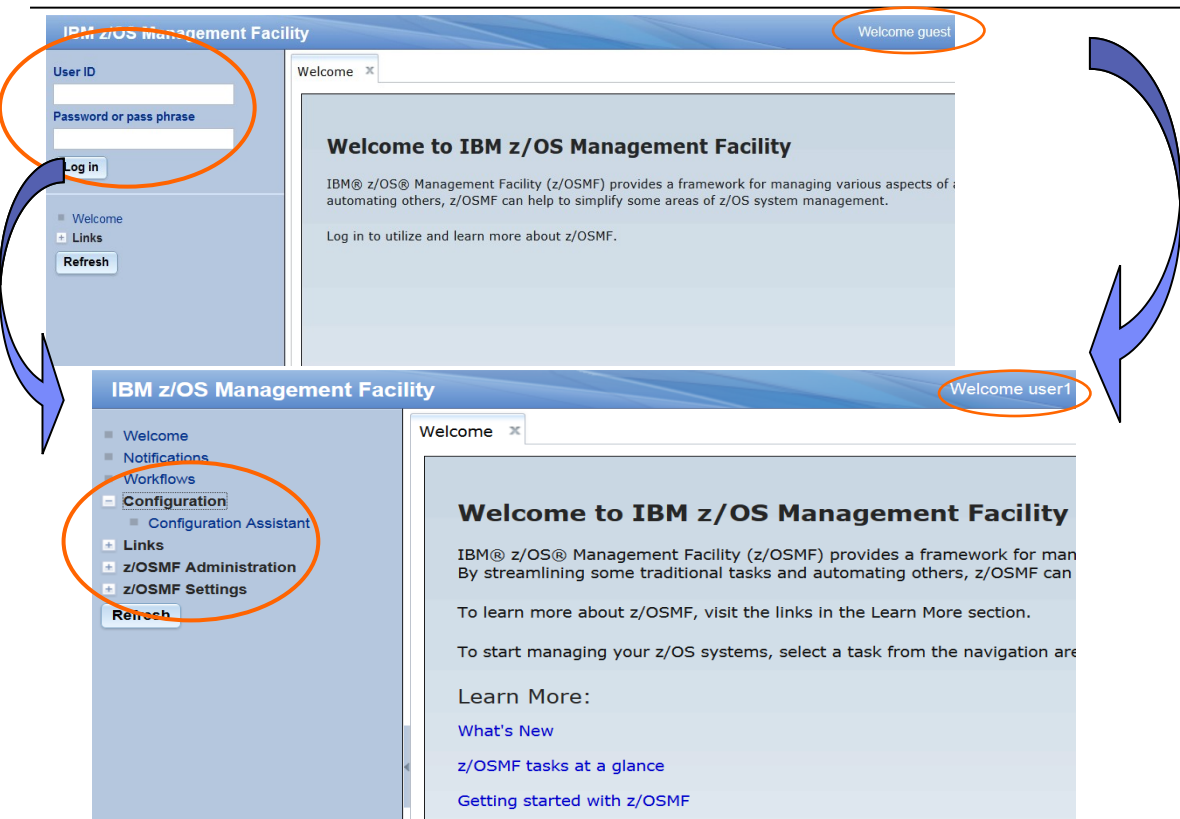
What is required to use the Configuration Assistant on z/OSMF?

- z/OSMF must be installed and configured (setup) by an administrator
 - Requires administering/maintaining another z/OS application
- As z/OSMF grows, the benefits will out-weigh the start-up pains
- Configuration Assistant has no requirements for the installation of “other” supporting products or applications
 - Once z/OSMF is installed, users can begin using the Configuration Assistant

What does z/OSMF really provide?

- z/OSMF is a free, fully supported IBM product that provides a browser-based UI that is a portal specifically for accessing z/OS systems management functions
 - IBM applications “plug-in” to z/OSMF: these are providers for systems management functions that are geared toward simplification of traditional z/OS tasks
 - Currently only supports approved, IBM-product plug-ins
 - V2R1 is based upon the new light-weight, WebSphere Application Server with Liberty Profile runtime – significantly improved installation, setup, memory consumption, and disk footprint
- z/OSMF provides a common framework for plug-ins (like the Config Assistant) that includes:
 - Provides a user login with authentication (z/OS user Id)
 - A common launch point which is panel with a navigator where applications like the Config Assistant can plug-in and be invoked
 - Each plug-in registers as a “task” which defines its invocation link (html or jsp) . This link then appears in the z/OSMF navigator.

System Admins “Log-in” and Access Configuration Assistant



What does 2/05SM provide?

cont..

- Defines common UI resources (panel elements) used across plug-ins to allow for common look and feel, providing consistency
 - Common panel widgets (UI elements) for common look and feel, ex: tables (common column filtering) , breadcrumbs, etc
 - Moving toward use of UI technology and designs that standardize across IBM products

Configuration Assistant (Home) > IPsec

Breadcrumb

Panel Title

V2R1 Current Backing Store = NextPrototype

Select a perspective: IPsec

Tools

Systems Traffic Descriptors Security Levels Address Groups Requirement Maps Reusable Rules

Actions

Name Filter	Description Filter
☐ abc	
☐ All_other_traffic	IBM supplied: All traffic types
☐ Centralized_Policy_Client	(VERIFY) IBM supplied: Centralized Policy Client
☐ Centralized_Policy_Server	(VERIFY) IBM supplied: Centralized Policy Server
☐ CICS	(VERIFY) IBM supplied: CICS traffic
☐ CSSMTP	(VERIFY) IBM supplied: CSSMTP traffic
☐ DNS	(VERIFY) IBM supplied: Domain Name Server traffic
☐ EE	IBM supplied: Enterprise Extender (EE) traffic
☐ FTP-Client	(VERIFY) IBM supplied: FTP Client traffic
☐ FTP-Server	(VERIFY) IBM supplied: FTP Server traffic
☐ FTP-Server-SSL	(VERIFY) IBM supplied: FTP Server SSL traffic using port 990
☐ ICMP-Redirect-IP_V4	IBM supplied: IPv4 ICMP - Redirect traffic
☐ ICMP-Redirect-IP_V6	IBM supplied: IPv6 ICMP - Redirect traffic
☐ ICMP-Time_Exceeded-IP_V4	IBM supplied: IPv4 ICMP - Time Exceeded traffic
☐ ICMP-Time_Exceeded-IP_V6	IBM supplied: IPv6 ICMP - Time Exceeded traffic
☐ ICMP-Unreachable-IP_V4	IBM supplied: IPv4 ICMP - Unreachable traffic
☐ ICMP-Unreachable-IP_V6	IBM supplied: IPv6 ICMP - Unreachable traffic

Total: 59, Selected: 0

Common panel widget

Table with filterable columns and Action menu

What does z/OSMF really provide?

cont..

- Provides rules for translation. Japanese is currently supported.
- Defines browser products and levels supported.
 - Internet Explorer (IE8), IE9, and FireFox
- Key is that z/OSMF provides the framework for the plug-ins to create modern, service-oriented architectures when developing their functions!

Configuration Assistant becomes a modern web application

Redesigned the Configuration Assistant to better integrate with z/OSMF and other plug-ins

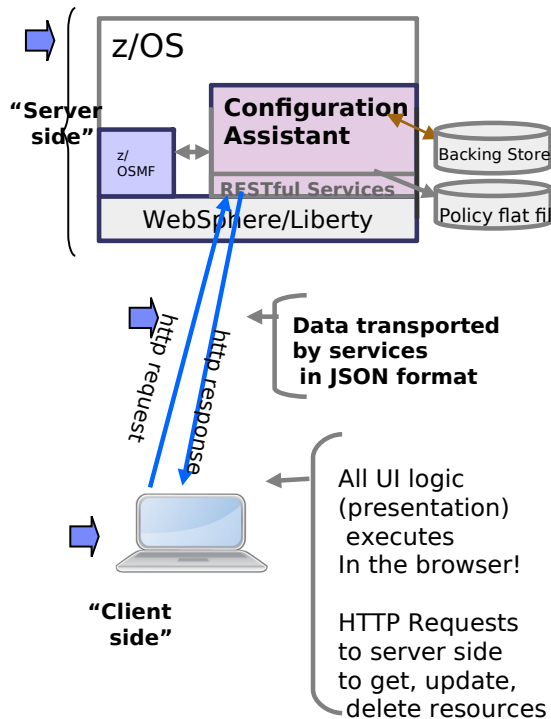
- Removed old UI infrastructure

1. Uses a Web 2.0 design based upon "AJAX" (Asynchronous JavaScript and XML) which provides the 3- tier architecture

- Client side (browser) provides the UI: based upon html, javascript, dojo, css, and z/OSMF common widgets
 - Allows for improved performance since much of the logic now executes in the browser

2. Browser communicates with the server over http. Accesses server side resources through RESTful web services - http verbs: GET, POST, DELETE to manage resources defined as URI's

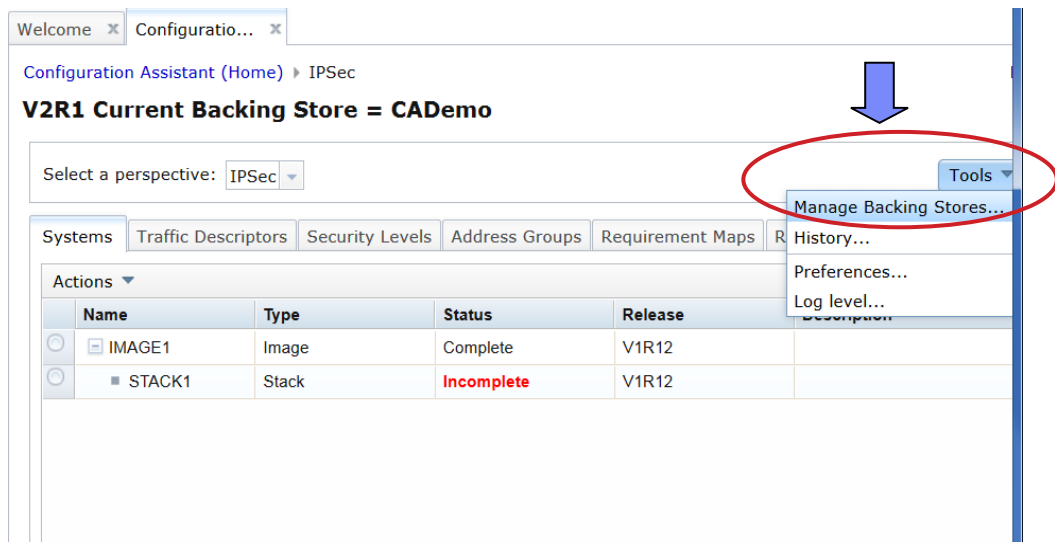
3. Server side, the Config Assistant defines and manages resources (ex: rules, traffic descriptors) defined with a URI and accessed through the services



Summary of the Redesigned Configuration Assistant

- Better integration with z/OSMF and improved look and feel
- Much better performance and modern web design
- Provides foundation for expansion aligned with IBM and platform strategies

V2R1 Improved Backing Store Management



The screenshot shows the V2R1 Configuration Assistant interface. At the top, there are tabs for 'Welcome' and 'Configuratio...'. Below the tabs, the text 'Configuration Assistant (Home) > IPsec' is displayed. The main heading is 'V2R1 Current Backing Store = CADemo'. Below this, there is a 'Select a perspective:' dropdown menu set to 'IPsec'. To the right of the dropdown, there is a 'Tools' button. A red circle highlights the 'Tools' button, and a blue arrow points down to it. A context menu is open, showing the following options: 'Manage Backing Stores...', 'History...', 'Preferences...', and 'Log level...'. Below the context menu, there is a table with the following data:

	Name	Type	Status	Release
⊞	IMAGE1	Image	Complete	V1R12
■	STACK1	Stack	Incomplete	V1R12

V2R1 Manage Backing Stores Details

Welcome x Configuratio... x

Configuration Assistant (Home) > Tools > Manage Backing Stores

Manage Backing Stores: Current Backing Store = CADemo

"Locked" could be another status

Status is "moment in time".

Use the "Refresh" button to update.

Actions ▾			
Name Filter	▲ Status Filter	Time Last Updated Filter	
☒ CADemo	Current	2013-01-24 15:50:52	
☐ CADemoAKT	Available	2013-01-24 15:50:52	
☐ CATestIPSec	Available	2013-07-25 08:26:27	
☐ DianeBS_ATTLS_FF	Available	2013-01-24 15:50:53	
☐ DianeBS_ATTLS_IE8	Available	2013-04-01 12:52:18	
☐ DianeBS_ATTLS_IE9	Available	2013-01-24 15:50:54	
☐ DianeBS_DMD_FF	Available	2013-01-24 15:50:54	
☐ DianeBS_DMD_IE8	Available	2013-01-24 15:50:54	
☐ DianeBS_DMD_IE9	Available	2013-01-24 15:50:55	
☐ DianeBS_IPSEC_LAN_FF	Available	2013-01-24 15:50:56	
☐ DianeBS_IPSEC_LAN_IE8	Available	2013-01-24 15:50:58	
☐ DianeBS_IPSEC_LAN_IE9	Available	2013-01-24 15:50:58	
☐ DianeBS_testswing	Available	2013-01-24 15:50:59	
☐ DianeBS_testswing2	Available	2013-01-24 15:50:59	
Total: 69, Selected: 1			

Refresh

Last refresh: Jul 30, 2013 2:18:36 PM local time (Jul 30, 2013 6:18:36 PM GMT)

Close

Actions

Welcome x Configuratio... x

Configuration Assistant (Home) ▶ Tools ▶ Manage Backing Stores

V2R1 Current Backing Store = xyz

Actions ▼

- Open
- Delete
- Import...
- Extract...
- New...
- Save As...
- Transfer...
- Modify Filters...
- Hide Filter Row
- Clear Filters
- Modify Sort...
- Clear Sorts

	▲ Status Filter	Time Last Updated Filter
IE8	Available	2013-01-24 15:51:15
IE9	Available	2013-01-24 15:51:15
re	Available	2013-01-24 15:51:15
	Available	2013-01-24 15:51:16
	Available	2013-05-02 15:41:14
	Available	2013-01-24 15:51:16
	Available	2013-01-24 15:51:16
	Available	2013-01-24 15:51:16
	Available	2013-01-24 15:51:17
☐ R6Store	Available	2013-01-24 15:51:17
☐ R9Store	Available	2013-01-24 15:51:17
☐ rft	Available	2013-01-24 15:51:18
☐ saveData	Available	2013-04-23 22:41:47
☐ TEST	Available	2013-01-24 15:51:18

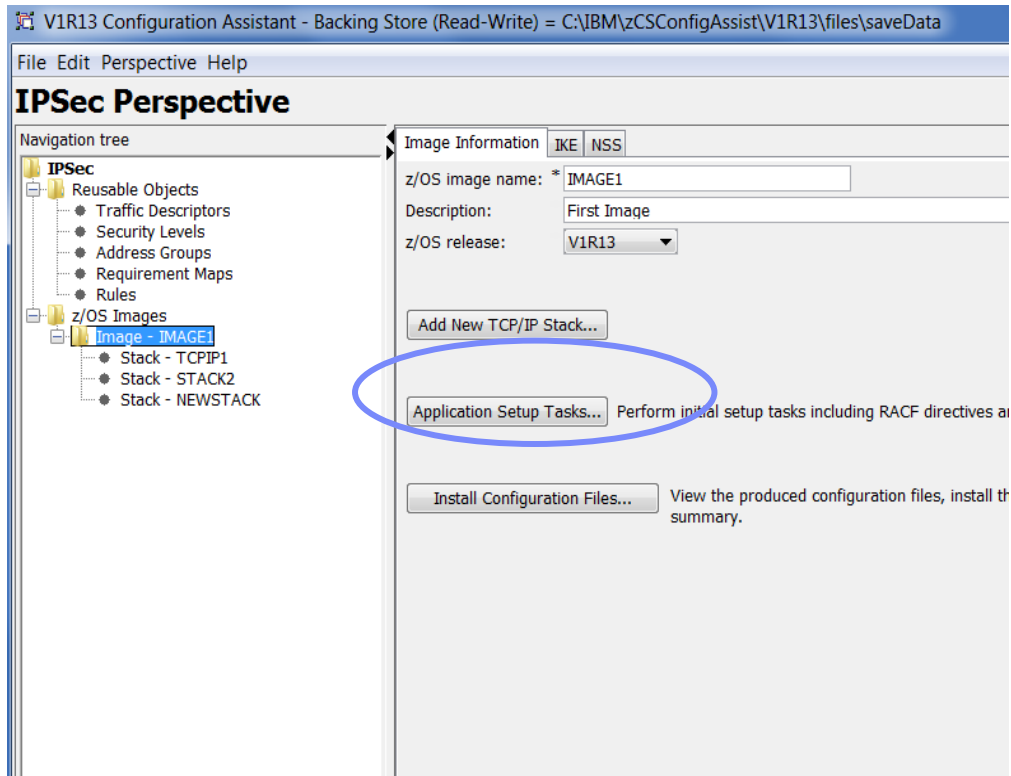
Total: 71, Selected: 1

Refresh Last refresh: Jul 30, 2013 2:38:01 PM local time (Jul 30, 2013 6:38:01 PM GMT)

Application Setup Tasks now Integrated with z/OSMF Workflow Plug-in

- Setup Tasks are in the z/OSMF to the Workflow plug-in
- Application Setup Tasks are associated with each Configuration Assistant technology at the Image level
 - Help with setup of the Policy-based networking environment: Step by step instructions for SAF profile and configuration file setup, etc..., for the policy agent and other required daemons (syslogd, TRMD, IKE, etc)
 - Targeted toward new policy users or new technologies
 - In many cases, tasks are repeated for each Image (repetitive)
- Workflow provides a common place for setup tasks that can be tailored for each system where needed.
 - Upon entering the workflow task, users must “create” a new workflow
 - Create the Configuration Assistant workflows
- Workflows consist of a set of steps which are like instructions. Once the workflow is created, the workflow engine drives the user through the workflow steps using a wizard (best viewed with a quick demo).

Application Setup Tasks Refresher



Application Setup Tasks Refresher cont..

V1R13 Configuration Assistant - Backing Store (Read-Write) = C:\IBM\zCSCConfigAssist\V1R13\files\saveData

File Edit Perspective Help

IPSec Perspective

Navigation tree

- IPSec
 - Reusable Objects
 - Traffic Descriptors
 - Security Levels
 - Address Groups
 - Requirement Maps
 - Rules
 - z/OS Images
 - Image - IMAGE1
 - Stack - TCP/IP1
 - Stack - STACK
 - Stack - NEWST

Application Setup Tasks for Image IMAGE1

This panel contains tasks to enable IP Security for z/OS image IMAGE1.

- Select the task and click **Task Details**.
- Steps:
 - Follow the instructions on the panel.
 - As you finish each task, change its status to **Complete**.

List of setup tasks

Task name	Last completion date	Status	Comment
Installation Location Setup		Incomplete	
Policy Agent - RACF Directives		Incomplete	
Policy Agent - RACF Directives for dat...		Incomplete	
IKED - RACF Directives			
ipsec Command - RACF Directives			
Syslogd - RACF Directives			
TRMD - RACF Directives			
Policy Agent Configuration - Image IM...			
Syslogd - Configuration			

Task Details... Display All Instructions

☒ Permanently save backing store after performing

Task: RACF Directives for Policy Agent Startup

Instructions View steps for completing this task.

View Contents... Show contents of the file.

Install File... Install the file to the z/OS file system.

Attach comment:

☐ Mark task as complete

OK Help ?

Application Setup Tasks Refresher cont..

RACF Directives for Policy Agent startup

Before starting the Policy Agent daemon, you must authorize Policy Agent to access appropriate system resources.

Before you begin

1. The sample setup specifies 'PAGENT' as the user name defined to run the Policy Agent application. If a different occurrence where 'PAGENT' is used as a user name.
2. Review the instructions for the Policy Agent Startup task. Once Policy Agent is started, it will start and monitor IKED, SYSLOGD, and TRMD.

Install the sample job

Included below is a RACF job that you can use to prepare for Policy Agent execution.

1. Select Install to deliver the RACF job to the target system. The name of the file on that system will be - /etc/
2. The first portion of the job defines a RACF user of PAGENT.
3. The next portion of the job permits PAGENT to the BPX.DAEMON facility. The BPX.DAEMON facility is optional.
4. The next portion of the job grants users the ability to control Policy Agent. Change the ID parameter of the P or stop Policy Agent.
5. The next portion of the job defines a SERVAUTH profile INITSTACK that allows applications to open a socket.
6. Add a valid JOB card to the beginning of the job and submit it for execution.

```
//RPAGENT JOB RPAGENT,CLASS=A,NOTIFY=&SYSUID
/** Configuration Assistant, 2014.03.08 09:47:45
/** RACF Directives for Pagent startup
/** 1. Define user PAGENT to the STARTED class
/** 2. Permit user PAGENT to the BPX.DAEMON facility
/** Note that BPX.DAEMON is optional and the PERMIT
```



Required JCL

Help for using the Workflow Engine Plug-in

Workflows x Configuratio... x

Welcome to V2R1 Configuration Assistant for z/OS Communications Server

Use this task to create and manage configuration for z/OS Communications Server policy-based networking functions.

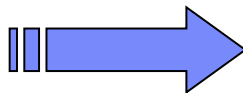
Select a backing store for configuration:

saveData

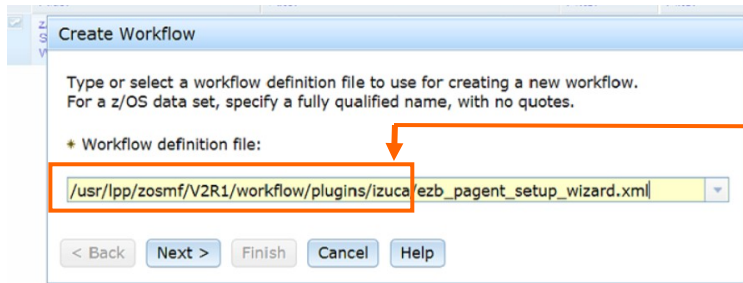
Open

Learn more about Configuration Assistant:

What's New	See what is new in this release.
Getting Started	First time users can learn about Configuration Assistant.
Migrating to z/OSMF	Migrate backing stores from Windows to z/OSMF.
Application Setup Tasks	Workflows to guide the setup of required applications.
Tutorials	Link to tutorials.
FAQs	Link to Frequently Asked Questions.



From Tutorial: Finding the List of Workflows



All Configuration Assistant Workflows are in this directory.

Workflows for Policy-based Networking

- **ezb_pagent_setup_wizard.xml** - This workflow provides the setups for setting up the Policy Agent (Pagent). Pagent is required for all of the policy-based networking technologies: IPSec, AT-TLS, IDS, PBR, and QoS. Pagent uses syslogd for logging.
- **ezb_dmd_setup_wizard.xml** - This workflow provides the steps for setting up the Defense Manager Daemon (DMD). DMD also uses TRMD and Syslogd for logging.
- **ezb_ike_setup_wizard.xml** - This workflow provides the steps for setting up to run the IKE daemon (iked). The IKE daemon uses syslogd for logging.
- **ezb_nss_setup_wizard.xml** - This workflow provides the steps for setting up the Network Security Services (NSS) daemon. The NSS daemon uses syslogd for logging.
- **ezb_trmd_setup_wizard.xml** - This workflow provides the steps for setting up the Traffic Regulation Management Daemon (TRMD). This is used with IPSec, DMD, and IDS technologies for logging. It works in conjunction with Syslogd to provide logging.
- **ezb_syslogd_setup_wizard.xml** - This workflow provides the steps for setting up Syslogd.
- **ezb_tcpip_profile_sample_wizard.xml** - This workflow provides a sample Tcp/Ip profile which contains common statements required to enable AT-TLS and IP Security, and additionally includes port reservation statements for running daemons.

z/OSMF Workflow Plug-In



IBM z/OS Management Facility

- Welcome
- Notifications
- **Workflows**
- Configuration
 - Configuration Assistant
- Links
 - z/OSMF Administration
 - z/OSMF Settings

Refresh

Welcome x

Welcome to IBM z/OS Management Facility

IBM® z/OS® Management Facility (z/OSMF) provides a framework for managing z/OS systems. It can help to simplify some areas of z/OS system management.

To learn more about z/OSMF, visit the links in the Learn More section.

To start managing your z/OS systems, select a task from the navigation area.

Learn More:

- [What's New](#)
- [z/OSMF tasks at a glance](#)
- [Getting started with z/OSMF](#)

Create the workflows

IBM z/OS Management Facility Welcome user1

Workflows x

Workflows

1. Use the "Create Workflow" in the Actions menu

Simplifies tasks through guided step-based workflows, and provides administrative functions for assigning workflow responsibilities and tracking progress.

Actions ▾

Workflow Name Filter	Description Filter	Version Filter	Vendor Filter	Owner Filter	System Filter	Percent Complete
☐ z/OS Communications Server: Setup to run Traffic Regulation Management Daemon (TRMD) - Workflow_0	z/OS Communications Server: Setup to run Traffic Regulation Management Daemon (TRMD)	1.0	IBM	user1	XESDEV.MVS160 (MVS160_001)	0%
☐ z/OS Communications Server: Setup for Syslogd - Workflow_0	z/OS Communications Server: Syslogd				XESDEV.MVS160 (MVS160_001)	0%
☐ Setting up to run IP Defensive Filters with Defense Manager Daemon (DMD) - Workflow_0	Setting up to run IP Defensive Filters with Defense Manager Daemon (DMD)				XESDEV.MVS160 (MVS160_001)	0%
☐ Set up to run Network Security Services (NSS) - Workflow_0	Set up to run Network Security Services (NSS)				XESDEV.MVS160 (MVS160_001)	0%
☐ z/OS Communications Server: IP Security with IKE - Workflow_0	z/OS Communications Server: IP Security with IKE				XESDEV.MVS160 (MVS160_001)	11%
☐ z/OS Communications Server: Install Sample Profiles for TCP/IP Components - Workflow_0	z/OS Communications Server: Install Sample Profiles for TCP/IP Components	1.0	IBM	user1	XESDEV.MVS160 (MVS160)	0%
☐ z/OS Communications Server: Setup to run Policy Agent - Workflow_0	z/OS Communications Server: Setup to run Policy Agent	1.0	IBM	user1	XESDEV.MVS160 (MVS160)	0%

Create Workflow

Type or select a workflow definition file to use for creating a new workflow.
For a z/OS data set, specify a fully qualified name, with no quotes.

* Workflow definition file:
/usr/lpp/zosmf/V2R1/workflow/plugins/izuca/ezb_pagent_setup_wizard.xml

< Back Next > Finish Cancel Help

Total: 7, Selected: 0

Refresh Last refresh: Aug 9, 2013 9:56:38 AM local time (Aug 9, 2013 1:56:38 PM GMT)

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Configuration Assistant-Provided Workflows

Workflows

Simplifies tasks through guided step-based workflows, and provides administra

Actions ▼			
	Workflow Name Filter	Description Filter	
☐	z/OS Communications Server: Setup to run Traffic Regulation Management Daemon (TRMD) - Workflow_0	z/OS Communications Server: Setup to run Traffic Regulation Management Daemon (TRMD)	1
☐	z/OS Communications Server: Setup for Syslogd - Workflow_0	z/OS Communications Server: Setup for Syslogd	1
☐	Setting up to run IP Defensive Filters with Defense Manager Daemon (DMD) - Workflow_0	Setting up to run IP Defensive Filters with Defense Manager Daemon (DMD)	1
☐	Set up to run Network Security Services (NSS) - Workflow_0	Set up to run Network Security Services (NSS)	1
☐	z/OS Communications Server: IP Security with IKE - Workflow_0	z/OS Communications Server: IP Security with IKE	1
☐	z/OS Communications Server: Install Sample Profiles for TCP/IP Components - Workflow_0	z/OS Communications Server: Install Sample Profiles for TCP/IP Components	1
☐	z/OS Communications Server: Setup to run Policy Agent - Workflow_0	z/OS Communications Server: Setup to run Policy Agent	1

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 - Learn about the [New IBM Training Model](#) and see how IBM is driving quality
 - Check [Training Paths and Certifications](#) to find the course that is right for you
- [Academic Initiative](#) works with colleges and universities to introduce real-world technology into the classroom, giving students the hands-on experience valued by employers in today's marketplace
- www.ibm.com/training



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 - ES42G: Parallel Sysplex Implementation Workshop
 - ES73G: IBM System z Parallel Sysplex Operations
 - [ES54G: Basic z/OS Tuning Using the Workload Manager \(WLM\)](#)
 - ES90G: Advanced Parallel Sysplex Operations and Recovery Workshop

★ Contains track relevant content

THANK YOU

For more information



URL	Content
http://www.twitter.com/IBM_Commserver  	IBM z/OS Communications Server Twitter Feed
http://www.facebook.com/IBMCommserver	IBM z/OS Communications Server Facebook Page
https://www.ibm.com/developerworks/mydeveloperworks/blogs/IBMCommserver/?lang=en	IBM z/OS Communications Server Blog
http://www.ibm.com/systems/z/	IBM System z in general
http://www.ibm.com/systems/z/hardware/networking/	IBM Mainframe System z networking
http://www.ibm.com/software/network/commserver/	IBM Software Communications Server products
http://www.ibm.com/software/network/commserver/zos/	IBM z/OS Communications Server
http://www.redbooks.ibm.com	ITSO Redbooks
http://www.ibm.com/software/network/commserver/zos/support/	IBM z/OS Communications Server technical Support – including TechNotes from service
http://www.ibm.com/support/techdocs/atmastr.nsf/Web/TechDocs	Technical support documentation from Washington Systems Center (techdocs, flashes, presentations, white papers, etc.)
For pleasant reading http://www.rfc-editor.org/rfcsearch.html	Request For Comments (RFC)
http://www.ibm.com/systems/z/os/zos/bkserv/	IBM z/OS Internet library – PDF files of all